

Title (en)

METHOD FOR DESIGNING A NUCLEAR FUEL ASSEMBLY WITH DAMPING GUIDE TUBE, CORRESPONDING SYSTEM, COMPUTER PROGRAMME AND SUPPORT

Title (de)

ENTWURFSVERFAHREN EINES KERNBRENNSTABBÜNDELS MIT EINEM DÄMPFUNGSFÜHRUNGSRÖHR

Title (fr)

PROCEDE DE CONCEPTION D'UN ASSEMBLAGE DE COMBUSTIBLE NUCLEAIRE A TUBE GUIDE AMORTISSEUR

Publication

EP 1481400 B1 20091014 (FR)

Application

EP 03720644 A 20030225

Priority

- FR 0300608 W 20030225
- FR 0202660 A 20020301

Abstract (en)

[origin: WO03075283A2] The invention concerns a method comprising the following steps: determining the falling speed of a control pencil (10) at the entrance of a lower damping section (26) of a guide tube during the fall of the bundle controlling (4) a fuel assembly in case of an emergency shutdown of the nuclear reactor; determining, based on the falling speed determined at step a), the evolution of the falling speed of the control pencil (10) in the lower damping section; determining, based on the evolution of the speed determined at step b), a maximum excess pressure generated in the liquid contained in the lower section (26); and determining, based on the maximum excess pressure determined at step c), a maximum circumferential stress generated in the lower section (26).

IPC 8 full level

G21C 7/20 (2006.01)

CPC (source: EP US)

G21C 7/20 (2013.01 - EP US); **G21D 3/001** (2013.01 - EP US); **Y02E 30/00** (2013.01 - EP); **Y02E 30/30** (2013.01 - EP US)

Designated contracting state (EPC)

BE DE ES FR GB SE

DOCDB simple family (publication)

WO 03075283 A2 20030912; **WO 03075283 A3 20040304**; AU 2003224222 A1 20030916; AU 2003224222 A8 20030916; DE 60329659 D1 20091126; EP 1481400 A2 20041201; EP 1481400 B1 20091014; ES 2332043 T3 20100125; FR 2836754 A1 20030905; FR 2836754 B1 20060929; US 2006165208 A1 20060727; US 7627073 B2 20091201

DOCDB simple family (application)

FR 0300608 W 20030225; AU 2003224222 A 20030225; DE 60329659 T 20030225; EP 03720644 A 20030225; ES 03720644 T 20030225; FR 0202660 A 20020301; US 50648105 A 20050713